Exo-Psychology

By Timothy Leary

From *Changing My Mind, Among Other Things*, 1982

Preface

Life on Earth, through the instrumentality of the human nervous system, has begun to establish colonies in space, from whence it can more accessibly contact Life in the galaxy. In our cells, we know that we, who are about to leave this small satellite of a peripheral star, are neither alone nor unique. Our most important challenge is to prepare ourselves neurologically to meet the "relatives" with whom we share the galaxy. Some will protest that human intelligence and resources should be used to solve agonizing terrestrial problems of unequal distribution. These larval protests, however sincere, are historically wrong and genetically futile.

The cause of the suffering and scarcity that now threaten humanity is neuro-political. The current malaise of the affluent nations demonstrates clearly that material rewards are not enough. The crisis the human race now faces is best described as navigational. Humanity has lost the map, the compass, the guidebook; misplaced the genetic code.

There is only one way from down. Up!

Men and women who know where they're going, who share a vision beyond the local-mundane, will learn quickly, work effectively, grow naturally, socialize lovingly, and evolve gracefully because of the genetic Law of Least Effort. Both species and individuals coast along on serene stupidity until faced with evolutionary challenges, at which point both species and individual become smarter, very much faster. WW II provides an interesting illustration. Basic principles of atomic structure, rocket propulsion, and radar had been well-known for decades. But under pressure of the Technological Imperative, the American and German scientific communities got smart—fast Migration is nature's classic solution to overpopulation, scarcity, and competition. When humanity begins to work for extraterrestrial migration, the competition for material acquisition will gradually diminish because unlimited space, energy, and resources await in the solar system. This simple-minded perspective of biological evolution presents hundreds of neogenetic ideas for which the human species is now ready. The reader should expect, therefore, that hir conditioned symbol-system is going to be jolted with unexpected, novel symbol combinations. A 20th-century human would find it most difficult to explain "now" to an average fellow from the 18th century. Some goodwill and openness is necessary in interspecies dialogues of this sort. This is exactly the situation that will exist when Higher Intelligence begins to communicate with human space colonies. Is there any more interesting or vital thing to do than to create the future?

Exo-Psychology Studies the Evolution of the Nervous System in its Larval and Post-Terrestrial Phases

The person who can dial and tune the circuits of the nervous system is not just more intelligent, but can be said to operate at a higher, more complex level of evolution. A powerful instrument for conscious evolution, the nervous system can be understood and employed for genetic tasks.

Emotional, mental, sexual, and ethical behavior is based on accidental imprinting of the nervous system during "critical" or "sensitive" periods of development—a fact devastating to pretensions of free will and conscious choice. An impressive convergence of evidence suggests that the brain is a bio-chemical-electric computer in which each nerve impulse acts as an information "quantra" or "bit"; that the human being, at this stage of evolution, is a biological robot (blot) automatically responding to genetic-template and childhood imprinting. We can evaluate ourselves only in terms of the symbols our nervous systems have created. An anthropological report about *Homo sapiens* written by extraterrestrials from a more advanced civilization would conclude that intelligent life has not yet evolved on this planet.

Other sciences have significance for future human destiny:

Astronautics: The significance of extraterrestrial flight has not yet been fully understood. Just as land-dwelling organisms rapidly develop neural and physiological equipment for the new environment, this transition to zero-gravity and extraterrestrial radiation will trigger off genetic and neurological changes necessary to adapt to interstellar life. The beginnings of exo-psychological adaptation can be noted in several lunar veterans who returned claiming cosmic insights (Mitchell), philosophic revelations (Schweickart), and rebirth symptoms (Aldrin).

Astrophysics has determined that perhaps as many as half of the 100 billion stars in our local galaxy are older than our sun. Astronomers have discovered basic life molecules in outer space and in other star systems, making it highly probable that more advanced forms of intelligent life are around the neighborhood. So far, humans have been neurologically incapable of conceiving of Higher Intelligence.

The left-cortical larval mind (Circuit 3) naturally assumes that life from other solar systems will be hostile and competitive: galactic cowboys and Indians. Very few science fiction writers (Stapledon, Asimov, Clarke) specify the manifestations of superior species, except as bizarre extrapolations and extremes of current human culture.

Whatever the mind can conceive, it tends to create. As soon as humans accept the notion of as-yet-unactivated circuits in the nervous system, a new philosophy of an evolving nervous system will emerge: human nature seen from the vantage point of older species.

Neurogenetics is a new science (with a respectable journal and membership dues), which studies the psychology (i.e., consciousness and behavior) of DNA-RNA. We assume that DNA contelligence is not restricted to planet Earth, but, indeed, was probably designed to return to extraterrestrial intelligence. Blueprints are remarkably similar from species to species. The DMA code can now be seen as a temporal blueprint unfolding sequentially like a tape-spool, transmitting preprogrammed construction plans from infancy, through childhood, • adolescence, maturity, menopause, aging, and death. Individual ontology recapitulates species phylogeny—that the human embryo, for example, repeats the evolutionary cycle. The theory of serial imprinting suggests that psychology repeats the evolutionary sequence: The baby recapitulates an invertebrate reality, the crawling child a mammalian reality, the preschool child a Paleolithic reality, the adolescent a domesticated-civilized reality.

Geneticists are just now discovering "unused" sections of the DMA, masked by histones and activated by proteins, which are thought to contain the blueprint of the future. Neurochemistry has recently discovered that neurotransmitter chemicals facilitate/inhibit nerve impulses and synaptic connections determining consciousness, emotion, memory, learning, and behavior. At the same time, psychopharmacology has discovered botanical and synthetic psychoactive agents that facilitate/inhibit states of consciousness and accelerate or dampen mental function.

The histone-masked sections of the DMA code can be studied to determine the sequence of future evolution.

Just as the DMA code, in the nucleus of the cell, is the genetic brain, the nucleus of the atom is the elemental "brain" that designs and constructs atoms and molecules according to quantum logic. Physicist" John Archibald Wheeler's work suggests that the atomic nucleus can receive, remember, integrate, and transmit information at extremely high velocities and can probably engage in most of the basic social behavior that we observe in living organisms.

We inevitably "psychologize" nature and personalize atomic events. Our laryngeal-muscular minds cannot conceive of what we have never experienced. But psychological systems based on Newtonian geocentric principles have done little to harmonize human philosophy. Does it seem too fanciful to base psychological concepts on the laws and structures of physics, chemistry, and astronomy?

Our dialogue with DNA and our conversations with atomic-subatomic and astronomical energy signals must, however, be two-way. We must open our "minds" to receive the signals being sent to our nervous systems by DNA and by elemental intelligences. Since DNA creates us, it is logical, diplomatic, and theologically conventional to base our psychology upon molecular laws and designs, upon the laws and structures of nuclear physics and astronomy; to think of ourselves as "atoms" or even "stars"—radiating, decaying, attracting, repelling, receiving and transmitting, forming molecular social structures, possessing a characteristic electromagnetic personality.

Neural Chauvinism: Every Body Has a Favorite Reality

From the scientific viewpoint, reality is an ocean of electromagnetic vibrations whirling momentarily into temporary structures—including bodies with nervous systems. Human consciousness (i.e., personal reality) is determined by the point along the frequency spectrum where the neural dials are tuned. Larval realities are defined by chunks of local environment attached to the nervous system at the time of imprinting.

Seasonal variations in solar radiation may alter DMA templating at the time of conception, determining human neurogenetic "types." The 12 Zodiac "signs" may crudely personalize 12 subspecies very different in neurological wiring, which reflect and recapitulate 12 stages of phylogenetic and human evolution. Each Zodiac "species" thus represents the mastery of one of the 12 neurological stages of evolution. (The tradition of using 12 peers in a trial by jury may be an unconscious recognition of the 12 subspecies populating human larval society.)

Just as the members of insect colonies are programmed to play certain roles necessary for hive survival—worker, drone, fertile male, brood queen—so each of the 12 larval types of human can be considered genetically separate; each contributes to the evolutionary process and carries a printed-out nervous system geared to a specialized survival task.

In addition, environment models imprinted during individual development define island realities such as language and dialects that vary from person to person and from group to group.

This unique specificity of reality means, among other things, that numerous cultural-imprint groups wander around the planet, for the most part in different realities. People unconsciously recognize this; social avoidance and clustering tend to respond to these reality chauvinisms. The hive cannot tolerate other realities: anyone different is crazy or alien. But despite their neural machinery, humans communicate with each other about material needs with amazing efficiency.

The newborn baby is equipped with behavior patterns necessary for immediate survival: to turn towards the mothering stimulus and suckle. Shortly after birth, the baby's nervous system focuses all the sensory equipment on the soft, warm, milk-producing stimulus, and permanently photographs this picture as "survivally good" and safe. If this viscerotonic imprint is not taken because of absence of appropriate stimulus during the critical period, the basic "survival security" system is not effectively wired up to human contacts.

The infant body is like a spaceship floating on the strange planet. The imprint is a neuro-umbilical lifeline extended from the nervous system, blindly groping for hospitable survival stimuli to w attaches and roots—thus creating the reality island. Once attached, the larval nervous system is hooked for life—unless retracted by ace trauma; or deliberately.

Each of the four neuro-umbilical lifelines is extended when each neural circuit emerges. During adolescence, for example, there is a critical or "sensitive" period of sexual imprinting. The sexual antennae, heretofore rudimentary, emerge and blindly scan for a place to root.

The first time the sexual system is fired in all-out response, an imprint is taken, determining the sensory, emotional, mental, and social stimuli that facilitate subsequent arousal and discharge. Accidental vicissitudes of Circuit-4 sexual imprinting—early erections and orgasms—can create kinky fetishes well-known to psychiatrists.

The neurologic mechanics of the mental-symbolic Circuit-3 imprint are less familiar. The acquisition of speech and manipulative behavior is accomplished by moving the 9 muscles of the larynx. When the child is mastering speech, the mental and emotional contiguous parents (and, more important, older children) determine whether the child's mind is open/trusting or withdrawn/rejecting.

Once the child wires up a specific method of thinking, subsequent education has little effect on intellectual manipulation.

Circuit-1 biosurvival language: movements, sounds, behaviors that express security, pain, or physical threat: eating, vomiting, sucking, disgust, embracing, moaning, physically aggressing or menacing.

Circuit-2 emotional language: gestures, postures, and verbal tones that communicate a status message. Gestural signals for affiliation, dominance, submission, begging, giving, coercion, and passive complaint require no cross-cultural dictionary. However, each culture has a specific status vocabulary of accents, gestures, ornaments, conspicuous possessions, postures. In the suburbs, a Cadillac indicates highest status; in the slums, a Cadillac indicates a pimp or cocaine dealer. And so it goes.

Each of us deals with a world defined by a unique pattern of neural wires and fixed umbilical lifelines. We try to understand emerging stages of human development by analogy to the metamorphosis of insects, since we are too close to the situation to appreciate metamorphosis in ourselves. Just so, we can understand the uniqueness of electro-neural "reality" by considering the consciousness islands of other species. We see a mouse run across the floor and a snake turn its head and strike. We assume that the snake "sees" what we see: a furry, brown animal. However, the snake uses heat receptors to locate prey. Programmed to strike at heat, the snake senses a neon spot of "warm" moving across its screen.

Human beings often interact across similar "reality" gulfs. Robot-programmed as differently as the snake, they vary in the number of languages they can exchange. The most primitive communicate and manipulate only in the oral dialect of their childhood village. The highly civilized larvals have mastered hundreds of symbol systems, can speak and write each other in several languages, cooperatively manipulate a wide variety of mechanical artifacts, professional sequences,

scientific codes, sports and game rituals.

In communicating with a larval, nonverbal cues establish that Circuit 1 is safe and Circuit 2 is cooperative. The next step is to establish which muscle-thought languages are shared and can be appropriately exchanged. Most larval interactions—buying, selling, superficial socializing—are brief and limited. Extended conversations are loaded with complexity because emotional factors inevitably intrude. Giving information to others is often resented because information possession implies power.

Circuit 3 is activated when the young child is in a position of weakness. Adults or superiors teach the L.M. (laryngeal-manual) symbol systems. The ability to learn symbols is determined by emotional context—the person with the information is placed in a superior position over the receiver. Just as chemicals "fix" a photographic image on film, so is the neural image of the island-reality "fixed" by synaptic chemical bonds at the time of imprinting.

A child growing up finds a certain stability and consistency in the social cues SHe imprints. Hir parents speak the same language, share rituals with the family next door. This consensual agreement provides the illusion of a "reality" shared with those in Hir culture group. "Sanity" is defined in terms of one's ability to convince oneself that SHe perceives what others do. Social psychologists' "cognitive dissonance" experiments show how easily and naturally humans distort objective data to fit neural expectations.

We believe what we are imprinted to believe. We think that the tiny turf to which our neuro-umbilical lifelines attach is "reality." The fact of separate, subjective realities based on individual imprints is frightening for the preneurological human. (Recall the parable of the 8 blind men and the elephant?) This separateness accounts for the terror felt in the presence of an "insane" person—who, in many cases, is actually aware of the neural insulation separating people and might be considered more sane and accurate than the deluded "normals." Casteneda's Do Juan (in *Tales of* Power) gives a good description of the imprint reality...

Sorcerers *say that we are inside a bubble into which we ai placed at the moment of birth. . . . It begins to close until it hi. sealed us in. That bubble is our perception. We live inside th, bubble all of our lives . . . until all our attention is caught by and the description becomes a view.*

Imprints Can Only Be Changed Biochemically

The Circuit-1 emergency system commands millions of survival action Early "danger" imprints and genetic programs cue this powerful, bas system, which, mobilized, affects every organ in the body. The intransigence of human "phobias" and "security blankets" is caused by chemico-electric synaptic patterns.

Security means that imprinted lifelines are securely fastened I a stable island-reality.

When action inside the body becomes so intense so as to alt synapse chemistry, imprint lifelines to the external environment ai retracted. Shock, illness, trauma, drugs, child delivery, stimulus deprivation, and electrical charge. The result is a new reality for the patient. When the somatic infection is cured, the emergency "sick" wiring me remain in operation, preventing the restoration of normal function. Conversely, infection or malfunction may require curative change blocked by the normal "wiring." This may help explain acupuncture. The needles have little effect on the fleshy system, but—particularly when energized with mild electric charges—may affect the synaptic programs.

Conditioning Biochemically Links a New Stimulus with an Imprint

The notion of imprinting a form of immediate and irreversible "learning" —has created some confusion, since according to the classic definitions of most psychological theories, "Learning occurs as the result practice." But psychological theories of learning based on observation of external, visible behavior pay little attention to the internal, invisible neurological situation. First, the imprint hooks the natural unconditioned response to an external stimulus—the releaser mechanism. Conditioning then connects (wires up neurally) other stimuli with the imprinted stimuli. Learned stimuli can then trigger the response imprinted to the original stimulus. If the infant's Circuit 1 is positively imprinted to Mother, other learned cues (aprons, kitchen, perfume) can also trigger off the "positive-approach" response.

Conditioning Cannot Change an Imprinted Reality

Skinnerians attempt to "shape" symbolic, manipulative Circuit-3 behavior—a futile, coercive business. Operant conditioning "works" by means of immediate and *continual* reinforcement.

In 1961, to the Center for Personality Research at Harvard came an enthusiastic Skinnerian to report on the applications of operant conditioning to patients in a mental hospital. One behavior to be inhibited was hallucinatory talk. Now many among us believe that hallucinations have a functional role in the psyche: automatically extinguishing hallucinations might restrict some message of importance, even if not understood or considered useful to the psychologist's reality. Using immediate reinforcement, the Skinnerians instantly produced a cigarette every time the patient made a non-hallucinatory comment and took the cigarette away every time the patient hallucinated. The researcher gleefully announced that the rate of hallucinatory comments dropped by a significant level.

Even more impressive changes in behavior accompanied the giving or deprivation of food. The Skinnerian glumly complained that hospital rules prevented them from carrying out this experiment to the point of starvation: "If we had total control over food intake, we could really shape behavior." The operant conditioner may not have heard the comment by one staff member that most of the dictators in world history had used this technique.

Two groups of technocrats clamor to change the behavior of their fellow citizens: Right-wing punitive coercers, and liberal rewarders.

Punitive coercion works only as long as the threat remains, and thus requires a police state.

Liberal social psychologists believe that they can change behavior by supportive, egalitarian methods—head-start programs, Peace Corps, busing, tutoring. Both groups' attempts are futile because they attempt to recondition, rather than reimprint.

The more intelligent experimental psychologists, for whom Skinner is spokesman, believe they can impose behavior change by involuntary operant conditioning. This, however, works only when the conditioners are continually present to reinforce. Left to their own devices, the "subjects" immediately drift back to the magnetism of the imprint and genetic template.

Imprinting requires no reinforcement. Let me imprint the infant, and you try to condition the child; let me imprint the child, and you try to condition the adolescent. The imprint requires no repeated reward or punishment; the neural fix is permanent. Conditioned associations, on the contrary, wane and disappear with lack of repetition.

In order to condition human behavior, get control of stimuli early in childhood and maintain this control throughout life. In the psychological Utopia, continual psychological testing would identify potential troublemakers early in the game and special conditioning programs would eliminate individual eccentricity.

The case for the Political Conditioners can be simply paraphrased: To make human beings dutiful, virtuous, reliable, prompt, efficient, happy, law-abiding, government psychologists must have total control over the citizenry and there must be total secrecy and censorship.

One dissident, one freedom-oriented psychologist can totally disrupt psychological fascism by public exposure. If parents and children are warned about the method of conditioning, they can consciously decide whether to resist, passively or actively. Most psychological tests are ineffective, if the subject has been warned about their purpose and construction. Even brainwashing drugs can be counteracted by the person who learns the specific effects of neurochemicals. Thus the proposals of B. F. Skinner cannot be implemented except in a state where the government has total control of communication. "Will the dog roll over in the absence of the master?" is the question that haunted the aging Mao.

Larval humanity now faces a genetic crossroads. Some will choose to solidify social conditioning by manipulating the child's environment and thus domesticating the imprint: Maoism. Others will choose to mutate to a higher level where each person is taught to manage and control hir own imprinting and conditioning. We can expect that many different social groups will emerge along each direction.

Imprinting Limits Reality to the Local Environment

After each daily tide of association and reward-punishment, coercive behavior-control methods must be repeated. The coercive nature of learned behavior *appears* voluntary; in fact, the conditioned robot is obsessively drawn back to his place in the sandbox. If we remove the symbol-rewarding environment or fail to produce the conditioned stimulus, the humanoid robot goes mad, because SHe has nothing to do. We can accurately speak of stimulus junkies. Social deprivation creates desperate reward-hunger. The social reality of conditioned response requires continual rewarding. The ordeal of Sisyphus was an exciting adventure compared to the monotony of social conditioning. Trying to recondition an imprint with reward-punishment is like dropping single grains of sand on a steel pattern. Decades of sand can wear down the imprint. The aging politician gets lazy, the aging homosexual becomes too fatigued to cruise, etc.

To change the shape of metal forms, one must apply enough energy to rearrange the molecules. So with neural imprints: massive biochemical energy is necessary to loosen the molecular synaptic bonds. With the present repertoire of Circuit-6 neurotransmitter drugs, it is apparently possible to reimprint only about once a week. It takes from 5 to 7 days for the reimprinted nervous system to harden into new circuits. Ill-prepared LSD sessions tend to reimprint the past conditioned structure, thus charging with new energy the habit patterns of the old island reality. One often hears the complaint from people who have taken LSD repeatedly that, after a while, the "trips" were the same. If the recasting of the mind occurs over and over again in the same place with the same set of characters, this is like having the most precise and expensive photographic equipment and, without moving it, continuing to photograph the same object.

The imprint-fix is sudden. Post-imprint conditioning, centering on the positive and negative poles of the imprint, takes time and repetition. Around the initial imprint, billions of conditioned associations build up over the years, forming the structure of personality. Where new models are imprinted, it takes time to start building up new circles of conditioned reflexes. Some early researchers concluded that a 6-month wait should occur between LSD sessions to "work through the new insights." The exo-psychological phrase is "to allow new conditioning to • network around the new imprints."

Reimprinting sessions, therefore, require careful planning so that previous aspects of realities that one wishes to exist in future reality are present to be imprinted, and that during the "sensitive" period, new models remain around to allow new associations to build up around them.

Most world travelers move their robot-bodies from country to country, experiencing only symbolic versions of home. Two neurologi-cians, a newly married couple, embarked on a psychedelic world tour. Their procedure was to fly to a country and enquire as to the "spiritual" center of that nation. In India, they were told to go to Benares. In Greece, to Eleusis; in Japan to Kyoto. Then in Kyoto, they asked where the spiritual center, the "soul" of Kyoto was to be found. They spent a week reading about the history, politics, culture, art, myths of Japan and Kyoto, then went to the "holiest" place, ingested a Circuit-6 neuroactive chemical (LSD) that opened the nervous system to new imprints— which in this case were structured by the architecture and regalia of the Emperor's palace. For six hours they absorbed the signals of the place and became neurologically Japanesed.

This is the way to "see the world"—to retract imprint roots and move the unattached nervous system to a new locale. Without such flexible vulnerability, we can experience nothing outside the membrane formed at adolescence or, in the case of women, their last childbirth. Such neural touring is no end in itself, but a rudimentary training exercise for the brain's serial possibilities. The neurological goal is to increase consciousness and intelligence. But when the nervous system can move and change realities by serial reimprinting, its own limitations become apparent: basic genetic dimensions of reality-construction are limited and guided by the genetic template. This most powerful determinant of human behavior cannot be changed; only understood and adapted until postlarval humanity has evolved genetic engineering.

The most intelligent use of the nervous system is to imprint the DNA code. The evolution of humanity of billions of years to come may already be preprogrammed in the genetic code, blocked from expression by chemical barriers called histones. The blueprint of DMA has designed us to move life off the planet and eventually evolve beyond matter as we now know it. It is about time to use our heads; become very contelligent, very rapidly.

One who allows hirself to be controlled by conditioning or imprinting is accepting robothood. It is of little use, however, to go on reimprinting larval or somatic realities. Circuit 6 is designed for extraterrestrial existence, for genetic consciousness. Neurotransmitter drugs are thus seen to be post-larval in function.

Until now, human beings have been neurologically unable to conceive of the future. This inhibition (neophobia) is genetic: for the caterpillar to "think" about flying would be survivally risky. Larval time involves short periods and narrow perspectives. The farmer looks to the next harvest, the politician to the next election, parents to their children.

The 4-brained person does not want to know about the future because it threatens the stability of the reality imprint. There is a taboo about future forecast. Future *Shock* describes the terror and confusion created by a world different from one's childhood realities. Even scientific groups are curiously unable to foresee evolving neurological-mutational change. The Club of Rome, the RAND Corporation, Herman Kahn, all extrapolate material trends of the past; thus are we told that the future will be a global extension of a Swedish Los Angeles. Most current "futurists" forecast an air-conditioned anthill world in which personal freedom and creativity are limited by population, scarcity, and restrictive social control.

One possibility is routinely omitted—a sudden global raising of contelligence.

The 1960's witnessed a widespread retraction of larval imprints. The new "hippie" imprints were not thoughtfully selected: a "drop-out" away from the parent-culture and an unfortunate tendency to reject technology and scientific thinking. The drug culture of the 1960's wandered around, "spaced out," "high," but with no place to go (one generation too early for interstellar migration). Into this neural vacuum rushed the karma dealers, Jesus salesmen, "spiritualists," providing occult terms and "other-worldly" explanations for the new transcendental states. After retracting imprints from the material culture, the 1960's went back to Jesus, Hasidism, India, the nature simplicity of the pioneers—the consciousness fads became soothing terrestrial "turn-offs," offering peace of mind for premature mutants. (The water-bed, with its hint of zero-gravity sensory freedom, is an example of a Circuit-5 fad.)

It is natural that the first post-larval generation would appear confused, disoriented, frivolous, irritatingly vague. A mutation always disturbs the larval culture. No one wants the reality game to become bigger than one's childhood imprints. But the genetic timetable schedules mutations with relentless continuity. And the rate of evolution is accelerating. Physique, neurological function, ecology, density and diversity of population are changing at an accelerated rate. Consider the human situation 100 years ago. Now assume that the same rate of accelerated change continues. How will we evolve in the next 1,000 years?

Evolution produces an increasing spectrum of differentiations. About 75 million years ago, certain insectivore lemurs contained the seed-source from which 193 varieties of primates, including the human, were to emerge. Of the next 100 persons you meet, probably each will evolve into a new species different from you as the rabbit from the giraffe.

The work of Bruce Niklas at Duke reminds us of the intransigence of chromosomal patterns: If chromosome strands are experimentally disarrayed by poking them with a micro-needle, the molecules move back into the original sequence — much the way iron filings "swim" into position in response to magnetism. This suggests that some sort of energy-field pattern operates to keep the DNA code coherent and logical. The work of geneticists like Paul, Stein, and Kleinsmith suggests that histones mask the half of the DNA code containing the futique design of the organism. The error of genetic democracy led Gauguin to ask, "Where did *we* come from and where are we going?" Each of us transmits a very different preceded design. The question can only be asked, "Where am / going? What genetic futique do /carry in my genes?"

The Post-Larval Must Be Cautious in Communicating with Larval Humans

In communicating with Earthlings about sexual, philosophic, or ethical matters, one enters very dangerous terrain. Stick to larval issues. It is almost impossible to discuss philosophy with yokels.

(Interstellar Tourist Guide a.k.a. Exo-Psychology)

Exo-psychology holds that the human larval exists in a reality defined by 4 survival imprints. Although the brain receives 100 million impulses a second, mundane consciousness is limited to the 4 imprinted game-boards. The larval has no interest in you unless your behavior offers meaning in terms of hir limited reality-island. Larvals do not like to receive information unless it immediately rewards their emotional status. (Democrats were delighted to hear the facts about Nixon, but Republicans were irritated and resistant.)

Larvals submit themselves only to new symbols that build on established systems or give promise of future rewards. This resistance to learning is neurological and biochemical. New ideas require a change in the wiring and literally cause a "headache." That larvals learn almost no new symbol systems after "childhood" explains why it takes at least one generation for a new idea to be understood.

Few symbols now exist for post-larval "butterfly" processes, and communicating with larvals about sexual, philosophic, or ethical matters enters dangerous terrain.

When sensed as different, Circuit-4 moral and social symbols or behaviors trigger off responses of passion, even violence. Because of this sensitivity, humans tend to avoid philosophic discussions about life, death, philosophic ultimates, child-rearing, and sexuality. Discussing exo-psychology with a yokel is like discussing sexual experience with a pre-adolescent. SHe just can't understand the new reality because hir neural circuits have not been turned on (and SHe may turn you *in* for philosophic child-molesting). Larval humans naturally believe that Homo sapiens evolution has already reached its highest stage. The yokel can become passionately moralistic, attacking the post-terrestrial for being elitist, callous to human suffering, antihuman, escapist, even diabolical.

The Post-Terrestrial Must Also Be Cautious in Communicating with Premature Post-Larvals

The bland, smiling "hippie" and "yogi body-engineer," the first two transitional stages of post-terrestrial "wingless butterflies," are no longer hooked to social symbols. The Hippie-Zen adept no longer reflexively reacts to the virtue-shame systems by which society domesticates its workers; but has not yet evolved to master newly activated circuits. For these reasons, the exo-psychologist must use caution in communicating with the members of the "Woodstock" generation, who are too set in their ways (at age 25-35) to receive the neurophysical signals for extraterrestrial migration.